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Mr. Gurney writes to me that occasionally, when brought up by the wind, the Gannet has been extraordinarily plentiful on the coast of Portugal and off the south of Spain (where, by the way, I have often noticed it myself in winter), and further notes that it seems uncertain where the southern range of *S. bassuna* meets the northern range of *S. capensis*. Details and maps are given in Mr. Gurney's 'Life of the Gannet.' Curlously enough the most southern gannetry in Europe is the Bull Rock, Co. Cork, while the most southern breeding places known are on Bonaventura and Bird Rocks in the Gulf of St. Lawrence.

[To be continued.]

XXV.—Further Ornithological Notes from the Neighbourhood of Cape San Antonio, Province of Buenos Ayres. Part II. TROCHILID.E.—PLATALEID.E. By ERNEST GIBSON, M.B.O.U., F.Z.S.*

238. Chrysuronia ruficollis Vieill. Golden-tailed Humming-bird.

Mr. Hudson, in his brief notice of this species, states that it visits the more northern portion of the Argentine Republic; but he himself obtained specimens at Conchitas (near Buenos Ayres), and Durnford did the same at Punta Lara, farther south.

It has been left to Mr. Claude Grant to chronicle the Golden-tailed Humming-bird as a winter visitor to the Ajó district; for I had attributed the appearance of a Humming-bird during that season to a stray individual of our regular summer species (*Chlorostilbon splendidus* Vieill.)—most likely the young, from the darker plumage. Miss Runnacles, it should be noted, "observed it in every month throughout the winter of 1909." Picking out what I formerly took to be these aberrant occurrences of *C. splendidus* in my diary, 1 come to the conclusion that the Golden-tailed species arrives about the middle of April

* Continued from 'Ibis,' 1918, p. 415.

and leaves towards the end of August, these movements synchronising very nearly with its Glittering congener, which arrives on the 10th of September and leaves early in April. During all my long years' records the winter visitor figures but rarely; many years are an absolute blank.

240. Chlorostilbon splendidus Vieill. Glittering Humming-bird.

The Splendid or Glittering Humming-bird arrives sometimes as early as the 10th or 11th of September, but is not generally in evidence until the beginning of October. Towards the end of March it is scarce, and has definitely left by the middle of April.

It is not in my power to add to Mr. Hudson's description of its appearance and habits, and I will confine myself to a few additional notes upon its local nesting-customs. Only of late years have I found it taking advantage of the eaves of a dwelling-house, as described by Miss Runnacles ; our billiard-room, where there are some projecting ends of wire which tie down the French tiles, and which has an eastern exposure, is a favourite site. The verandah of my house, clothed with creepers, has also an annual pair, and visitors to our afternoon tea-table never fail to be charmed with the dainty nest suspended from a jasmine-twig only a few feet overhead ; the tiny tail of the occupant is seen over the one side, and on the other rests the head (the crimson bill projecting upwards), while the little black eves calmly survey the movements of the human group. The interiors of two arbours in the garden are occasionally favoured, the nests being attached to a bamboo stem or a honevsuckle spray. But my former researches-the result of long experience-invariably led me to inspect certain young Coronillo trees (a densely-foliaged evergreen) in small and open glades in the woods, where, just inside the thick umbrella-like top (and always on the eastern or sunny side) and suspended sometimes only two or three feet from the

ground, there was always every probability of a find. These situations contain an infinite number of analogous little bunches composed of dead Coronillo leaves bound together by spider-filaments (being indeed the home of one of these insects), and I have not infrequently passed a quarter of an hour, crouched or kneeling under the tree, systematically scanning or examining each of these objects with care (for the Coronillo is cruelly thorny), and encouraged in my quest by the sharp needle-like "zipp" uttered by the bird as it occasionally sped past unseen only to find that the nest had actually been within a few inches of my face all the time !

My earliest nest is one of the 24th of October; of four taken in the last week of that month, one contained much-incubated eggs, showing that they were approximately laid about the middle of October. Up to the middle of November the occurrences are general, after which there appears a break lasting until the middle of the month of December : this again is followed by a fresh start, which continues the laying-season until the middle of January. Occasionally the bird sits very close, for it is a fearless creature.

The newly-hatched young are repulsive-looking things, resembling small, black, hairy caterpillars. Who would connect these objects, lying in a fairy cradle, with the future flashing jewels—gifted with a mobility that is apparently less an action of flight than an exercise of volition?

The following is the description of a typical nest:— Attached to two twigs. Outside measurement at top $1\frac{1}{2}$ in. (35 mm.) by $1\frac{1}{4}$ in. (32 mm.) deep; inside, $\frac{7}{8}$ in. (22 mm.) by $\frac{5}{8}$ in. (16 mm.). Built of fine wool, moss, lichens, etc.; the outside disguised with small dark leaves and tragments of bark, cunningly held in place with spiders' webs; lined with thistledown.

The two eggs are pure white, much elongated, and with equally rounded ends. They average 13×8 mm.

245. Stenopsis bifasciata Gould. Wing-banded Goatsucker.

Hudson obtained a single skin of this species at Conchitas (Province of Buenos Ayres). Durnford found it in Chubut (Patagonia)—" rather rare there and in the vicinity, though resident and breeding in that district."

It is not to be wondered at, then, when I re-visited Buenos Ayres and the Yngleses at the end of 1916, I was exceedingly interested to find awaiting me a skin of the Goatsucker in question. It had been one of a pair which had appeared in June of that year (middle of an unusually cold and dry winter) in the "huerta" or vegetable-garden and orchard of the Yngleses, and is the first and only recorded occurrence since I took up residence in the district—forty-four years ago. The specimen was completely a *lusus naturæ* for all the people I showed it to, and to whom the Spanish designation of "Dormilón" or Sleeper (of general application to the whole family of Goatsuckers in this and the adjacent republics) conveyed no significance.

No other species of the Caprimulgidæ or Goatsucker family are known to me, or have occurred, so far as the Ajó district is concerned.

257. Chrysoptilus cristatus Vieill. Red-crested Wood-pecker.

Iris dark brown; bill black; legs and feet vary from dark grey to a greenish yellow.

It would not seem as if there was much to supplement my former notes of 1880 on this, our only Woodpecker. It has not increased in numbers, and certainly has not diminished. A pair generally nests in the garden (sometimes in a Paraiso tree, which is only separated by a railing from the kitchen-door, a few yards away), and two other pairs in the head-station woods. The first-mentioned birds are very tame, frequenting the patio frequently, and I have disturbed them in front of the very office door. Elsewhere, a small wood, or the old willow-trees remaining

at an abandoned sub-station or derelict cattle-well, may have its pair of occupants. Being to a considerable extent a ground-feeder, it is amply satisfied with a roosting-place and some modest facilities for its nesting-requirements.

I find that by a clerical error I had represented the eggs as being laid in the first half of October; the statement should refer to the latter half of that month (from the 15th onwards), and the period extends as late as the 23rd of November. Five is an exceptional clutch, four being the usual number. They are pear-shaped and glossy, and average 28×21 mm.

263. Ceryle americana Gm. Little Kingfisher.

My knowledge of this species-if I am right in my surmise of its identification-is exceedingly limited. In 1880, on the Arrovo Sauce Grande (between the sierras Ventaua and Pillahuinco), at a locality known as "Las Horquetas," I am positive that I had a glimpse of a Kingfisher; but neither then, nor since-on a subsequent visit to the valley of that river in 1904-could I gather any information on the subject from local residents. As the Ynglesitos estancia, on the slope of the Balcarce sierras (midway between Ajó and the Ventana-Pillahuincó ranges) and where there are various streams, none of our several English managers or staff ever chronicled the existence of any member of this genus; and the same remark applies to the Tomasa estancia, situated on the level campo adjacent to the Azul and Las Flores arroyos. Naturally, about the Yngleses estancia itself, where there are no streams and practically no banks to any of the lagunas of an adequate nature for nesting-burrows, the presence of a Kingfisher was not to be looked for. Accordingly, I was equally surprised and pleased when, on a visit to the Violetas estancia (about ten or twelve miles west of the Yngleses) in the summer of 1908-9, an individual bird sped past me as I sat on the bank of the Violetas laguna; I followed up, but failed to locate it. Of course, there is the possibility that it was only an errant or summer visitor; but I am inclined to the belief that it probably found its quarters suitable for a permanent residence. The laguna is large, with open water to half its extent and quite six feet deep, where banks rise to a height of three or four feet; the shallower extremity contains great beds of rushes and flags; and it possesses a large permanent stock of fish (of ratural introduction and now fully acclimatized), such as the "Liza" or Grey Mullet and the "Pejerrey," a species of Merluce. In any case, the bird was certainly a Kingfisher, and in size corresponded to *C. americana*.

268. Guira piririgua Vieill. Guira Cuckoo.

If the "Urraca" (vernacular for Magpie) has had a fair account of itself in my former paper, and a still fuller lifehistory from Mr. Hudson, the reason probably arises from the fact that the bird is "sui generis" wherever it is found —unique in plumage, flight, and gait; curious in its habits of everyday life; attention-compelling in all its vocal repertoire; eccentric from its method of nidification, where the nest is lined with green leaves, and the large but varying number of eggs are as often wasted on the ground as deposited in their proper situation; whilst the same eggs resemble large and lovely turquoises enveloped in snowy lace.

Harmless and unpersecuted, it is as numerous as ever in the Ajć district; perhaps, to judge from the increased number of nests found, more so in the summer than formerly.

The nest is generally situated in the centre and towards the top of the very thorny Coronillo tree about eight or nine feet from the ground and is built of sticks and twigs, sometimes nearly as flat as a Wood-Pigeon's, at other times with a considerable depression or hollow; in the latter case there is a lining of green leaves from the elder or "durasnillo negro." Generally, the parent bird is very wary when approaching or leaving the nest—I was particularly struck with this fact in the case of a nest situated in a Coronillo tree in front of the Yngleses dwelling-house and only some ten yards from the main door, and it only happened by mere

chance that I became aware of the existence of the birds and their nest.

The clutch may vary from four to ten or eleven, to which may be added those dropped on the ground below the nest (thereby often betraying the nest). I have taken eggs from the 21st of October to the 18th of March; the latter would evidently represent a second brood. Their average measurement is 41×31 mm.

270. Piaya cayana Linn. Chestnut Cuckoo.

The one and only recorded occurrence of this bandsome Cuckoo was in January 1913, when Mr. M. A. Runnacles shot a specimen in the garden of "Linconia," about six miles north-east of the Yngleses head-station. Besides kindly keeping the skin for me, he was able to add the information that the solitary individual was being mobbed by other birds (an experience to which our local Cuckoo, previously alluded to, is never subjected).

The specimen is now in the British Museum, and Mr. Charles Chubb comments upon the interesting incident as follows:—"This individual specimen is of the Paraguayan or southern Brazil variety (*P. macrura*), and is of special interest in connection with its range. In all probability it had crossed the estuary of the River Plate from the neighbouring Republic of Uruguay, instead of being a wanderer from Paraguay, which latter course would have involved following the very sparsely-wooded littoral of the Province of Buenos Ayres."

276. Conurus patagonus Vieill. Patagonian Parrot.

In 1879 I alluded to the "Barranquero" or Barrancabird as being common, though not a resident, passing over the Yngleses in the morning from the south-west on the way to its feeding-grounds in the rincónes, and returning in the evening, during all but the four summer months; to this I added further details and notes. In course of subsequent years I was enabled to corroborate the above period, with little or no variation. But, since

about 1900, there has occurred a curious verification of Hudson's statement that the species is dving out-" possibly owing to the altered conditions resulting from the settlement of the country by Europeans" (his remarks on this subject, together with the general account of the Bank-parrot itself, should be taken in conjunction with my original notes). From the date referred to (1900), the appearance of the former flocks became scarcer and more irregular, until very shortly after they seem to have ceased altogether-possibly about 1902. At least I have no further recorded occurrence after that year, and I was told that 1903 and subsequent seasons were total blanks. Equally with Mr. Hudson I mourn the Barranquero's departure, and to show its former familiarity I may mention how, in July of 1893, I shot three (little knowing they would probably be among the last of our familiar and noisy visitors) on the roof of the Yngleses dwelling-house. They were perched on one of the chimneys, down which they fell into an empty grate, and (I am glad to say) were duly made into "specimens"-the last of many of their species which figure in my skin-book.

About the year 1902 our manager at Ynglesitos (on the southern slope of the Balcarce sierras) told me of a curious incident regarding a nesting-site. A pair of Barranqueros excavated a burrow and nested in a well which supplied water for the sheep-dipping plant close to the head-station —quite undisturbed by the activities and noise of the sheepcorrals. Apparently the Barranquero—like Truth—must now be sought for down a well!

280. Bolborhynchus monachus Bodd. Green Parrakeet.

To my former notes on the "Cotorra" or Green Parrakeet I have little to add. The species is as abundant as ever, and likely to continue so under present conditions. Food, in the shape of thistle-seeds at least, is not likely to cease out of the land, and more maize also is grown in the district than formerly; whilst the nesting facilities have been improved rather than otherwise under the following

modification :- In 1872, when I first went to the Yngleses, I found the Parrakeet nesting in the garden and of course the surrounding woods of the head-station. Besides the larger structures in the higher trees there were innumerable newer and smaller ones suspended from the lower branches of the Tala and Coronillo trees-frequently to be easily reached from the ground. In 1884 I succeeded in banishing the fruit-marauders out of the garden, and undertook a systematic campaign against the denizens of the woods. The plan was to send a couple of peones, armed with long hamboos, on the extremity of which they wrapped some tow, and by this means set fire to the nests. By undertaking the operation in the first half of December-just before the eggs were laid-there remained no time available for the construction of a fresh nest and the rearing of a brood the same season; nor, given the general situation of the nests at the end of a branch, did the tree suffer any damage. Occasionally a Gaucho would perhaps find some difficulty in riding his half-tamed colt through the woods on his way to the head-station, and as he glanced at the crackling fires in the trees (the cause of his mount "trying to take two sides of the road at once") would mutter to himself "cosas de Don Ernesto"-"some of Don Ernesto's little jokes."

The modus operandi was quite successful, and in the course of a few years the Cotorras became reduced to a merely ornamental quantity (a note in my ornithological diary about that time says "Destroyed all Parrakeet nests in woods. Mem.: Some fifty opossums (*Didelphis aurita*) were killed as they left the burning nests ").

But it so happened that in 1872 there were three one-yearold Eucalyptus trees in the garden, the first grown in the district. These showed such rapid growth and adaptability that from the year 1880 many hundreds were subsequently planted—forming woods, groups, and avenues. In twenty years or more, many of these attained a height of perhaps a hundred feet (one such grove is visible at least twelve miles away), and the Cotorras have taken advantage thereof to the almost total abandonment of the Tala woods. The nests are practically inaccessible (at the summit of the Eucalyptus); nor can fire be employed for their destruction without the risk of ruining the trees—the Eucalyptus being highly combustible. Occasionally a regular battue is organized with half a dozen guns and maintained for a couple of days, but such sporadic efforts are necessarily only temporary, of limited effect, and expensive. So the Cotorra has come into its own again, and flourishes accordingly. Average measurement of eggs, 29×21 mm.

286. Strix flammea auct. Common Barn-Owl.

It would be difficult to say when the Barn-Owl first gained a footing-or, more accurately speaking, found a roof-treein this district. There are scores of admirable situations amongst our old Tala trees (cavities and hollows), as if specially designed for seclusion and nesting-sites ; but it is obvious that the abundant and ubiquitous opossum would render these advantages utterly nugatory. Nor at present have I succeeded in seeing it established in any barns or lofts of the head-station. A tradition has it that away back about 1860-on a fire being lit in the Yngleses dwellinghouse at the beginning of winter-an Owl was brought down the chimney (doubtless of this species). In later times, I think 1900, I was told that an Owl's nest had been found on the top of a haystack, underneath the "Dutch roof." But so far, at present, it is necessary to go farther-not a-field, but a-town-to look for it. The church-tower of the neighbouring town of General Lavalle harbours a pair, and there are others in various old disused buildings and in a large cattle-killing establishment (now closed) where it can be seen flying from beam to beam. And it is from there undoubtedly that it has spread to Linconia estancia (a couple of miles away)-the manager of which told me in 1913 that there was "quite a colony" in the roof of the dairy.

The preceding notes constitute at present all the information I have been able to gather regarding the species.

287. Asio brachyotus Forst. Short-eared Owl.

Though not unfamiliar to me, I would hardly agree with Mr. Claude Grant that the Short-eared Owl is "fairly common" in our district. On occasion I have put up a pair and a single bird in one day, but otherwise I have ridden the campo daily for months—at all seasons of the year—without chronicling a single occurrence. A proof positive is that I have never found a nest, or been able to procure the eggs, through any of my peones or shepherds. It has been left to Mr. Hudson therefore to furnish a fuller and more satisfactory description of the species and its habits than lies in my power.

Twice at long intervals (1873 and 1899) I have shot specimens in our woods. These aberrant instances (for its habitat is the rough grass-lands) were not merely casual, for in both cases the individual had been observed *in situ* sleeping on a branch—various days previously. The firstmentioned hooted somewhat like a dog baying as it took flight on being disturbed, the second was mute.

Four authentic clutches of eggs found by others more fortunate than myself were taken respectively on the 13th and 23rd of December, 28th of January, and the 26th of February (midsummer the two last). The number never exceeded three, and the average measurement of those that came into my possession is 44×33 mm. The largest is 45×34 mm, and the smallest 41×33 mm.

290. Speetyto cunicularia Mol. Burrowing-Owl.

To Hudson's full account of this species, and my former notes of 1879, there can be little to add. During the great flood years of 1913–15 it had a most disastrous experience. On my arrival at the Yngleses on the first-named year I found it drowned out of all the lowlands, and misfortune seemed to have rendered it less noisy and aggressive to passers-by. As might be inferred, all through the subsequent summer it was exceedingly numerous on all the higher sandy land, where the refugees had naturally added to the usual denizens. On my return again in the spring of 1915 (with the flood still prevailing) the over-population had much decreased. Still later, during my last visit (the summer of 1916-17) when a drought had ensued, the birds were generally distributed over their former area.

Regarding the breeding-notes, the full clutch would seem to be six, and the whole month of October—from the 5th onwards—the favourite season. The eggs average 35×29 mm.

292. Circus cinereus Vieill. Cinereous Harrier.

To my previous notes of 1879 I have nothing to add. My diary is only a monotonous record of individual birds observed at varying intervals and all periods of the year. Nor are these occurrences so numerous as to confirm my former statement that it was common in our district—a modification of my opinion in which I am borne out by Mr. Claude Grant.

Mr. Hudson writes little more *in extenso*, though he is able to briefly describe the nesting-situation and the eggs, a good fortune which has not come my way.

293. Circus macropterus Vieill. Long-winged Harrier.

This is the species erroneously alluded to by myself as *Urubitinga unicincta* Temm. (Ibis, 1879, p. 411).

Hudson dismisses it very briefly:—" *Hab.* South America. This species is also found in the Republic, but is not so common as the former species (*Circus cinereus* Vieill.)." But it is to be noticed, on the other hand, that he gives prominence to *Antenor unicinctus* as " the common Buzzard of the Plata region."

Claude Grant totally ignores *A. unicinctus* in the Ajó district of the "Plata region," though meeting with it in central Paraguay, where it also occurred with the firstnamed species still farther north. Yet, in conjunction with Miss Runnacles, he makes a small collection of *Circus macropterus* or *maculosus* at the Yngleses in Ajó, the series being so sufficiently complete that he is able to give a meticulous analysis of the "no less than six bewildering

stages of plumage which it undergoes" (Ibis, 1912, p. 277).

In view of the foregoing, it may doubtless be assumed that the Harrier found in Ajó is *Circus macropterus* (Vieill.) aut *maculosus*.

A clutch of three eggs, collected by Miss Runnacles on 14 November, 1909, appertained to a nest situated under a tuft of esparto in the rincónes, and was composed of a little dry grass. The three white eggs are somewhat pointed and rough-shelled. They average 50×37 mm.

295. Buteo swainsoni Bp. Swainson's Buzzard.

So far as Swainson's Buzzard is connected with the Argentine Republic (*vide* Sclater and Hudson's work) the recorded occurrences are limited to two, the first taken by Mr. Hudson himself at Conchitas in 1860, and the other by Mr. Frank Withington at Lomas de Zamora in 1886—both localities being within a few miles of Buenos Ayres.

Since then Claude Grant collected two individual specimens in Ajó ou 4 November, 1908, and 9 December, 1909, respectively. Both were young birds and males.

I have no further information to furnish on the subject. It is satisfactory to learn that the species can be added to the Ajó list.

296. Buteo albicaudatus Vieill. White-tailed Buzzard.

Hudson is familiar with this species as a migrant, visiting the pampas in the spring and autumn in a gregarious form— "flocks varying from thirty to forty, or as many as one or two thousand birds."

Claude Grant does not seem to have met with it during his visits to Ajó.

With all due deference and reserve I submit the following extracts from my diary (the only occurrences recorded in forty-five years), and which I would suggest may probably refer to the species in question :—

"15 December, 1872. Observed a flock of eleven fine greyblue Buzzards hovering over Yngleses head-station woods.

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Were beating against the wind, rising and falling, or soaring in spiral circles; occasionally one or two would alight on a tree.

"20 November, 1901. Some eight or ten Buzzards (similar to the above-mentioned) seen in vicinity of Linconia estancia. Flight slow and heavy; occasionally wheeled in circles. Frequently lit on ground, and allowed of fairly near approach on horseback.

" 3 December, 1901. Three or four seen in above locality.

"29 December, 1901. Seven or eight passed over Yngleses head-station in afternoon, flying leisurely north. With one or two exceptions all were adults, but in my hurried rush for a gun I had to content myself with the last straggler of the lot—an immature bird—which fell to a charge of number six shot at a considerable height. Later on Cumming shot another immature specimen in the wood. (Both these skins were unfortunately lost before their identity was established. The plumage was exceedingly soft and loose, and the skin extraordinarily thin and delicate.)

"3 January, 1902. One adult seen on north side of Yngleses.

"3 January, 1904. A flight of about a dozen beat over Yngleses head-station, flying south."

As will be seen from the preceding, these rare and irregular occurrences of a gregarious and striking bird of prey naturally impressed me, and I could have wished to have been more fortunate in the acquisition of specimeus.

297. Buteo erythronotus King. Red-backed Buzzard.

This bird has not been recorded in the locality again since I obtained a pair in June of 1875.

300. Geranoaëtus melanoleucus Vieill. Chilian Eagle.

In my former paper (Ibis, 1879, p. 409) I dealt at length with this—our largest and most strikingly handsome bird of prey.

I know that it subsequently continued to frequent and nest in its old haunts in the rincónes for several years, but

in 1899 I was told that it had not been seen for some time. Indeed, personally, from 1881 (when I saw a pair at their nearly-completed nest in the rincónes) the species has only twice come under my observation—a young bird in immature plumage at the woods of the Yngleses head-station in 1882, and an adult in the Real Viejo woods (on the southern boundary of the Yngleses) in 1904.

Nevertheless, Mr. Claude Grant obtained a series of specimens on his visit to the Yngleses in 1908–9, which shows that the locality continues to be favoured by residents or visitors.

303. Falco peregrinus. Peregrine Falcon.

Iris dark brown. Cere, eyelids, and nostrils yellow. Beak greyish-blue, black at tip. Legs and feet bright yellow.

My first record (and specimen) of this world-wandering Falcon is dated 20 December, 1884, and by a very curious coincidence there lies before me the last acquisition, one of Claude Grant's collecting, bearing the date of 20 December, 1909—an interval of exactly a quarter of a century.

After the first-mentioned occurrence, I do not seem to have observed another individual until 1898, a blank of no less than fourteen years. The following year (1899), a pair took up their abode during the summer in some very lofty Eucalyptus trees in the Yngleses garden. On both being secured for my collection, they were succeeded by a single bird, which I refrained from molesting. In the following years the same situation has been favoured generally—but not invariably—by a pair. These were always summer visitors, the earliest chronicled appearance being 15 November and the latest noted 11 April. Other occurrences are exceptionally rare—two or three individuals scen in the open campo and probably identical with those alluded to, and one between Ajó and Dolores.

I have no hesitation in connecting our visitors with the lofty Eucalyptus trees now existent, and which I have already spoken of. It would seem as if the Peregrine found the denser Tala woods did not furnish a satisfactory eyrie

to roost in, for I have never seen the bird or birds in any but the Eucalyptus, from that of 1884 to date. To show how little shy it is, the first individual's tree was within twenty yards of the billiard-room, adjoining the Yngleses dwelling-house.

That it nests with us is possible, but I have never detected any proof that such is the case. On coming in to roost at sundown the birds are sometimes silent, sweeping up to their perch and remaining for the night. Otherwise, they circle round once or twice, when the cry or scream is very striking, clamorous and metallic.

I weighed a pair. The male scaled 1 lb. 9 ozs.; the female 2 lbs. 5 ozs. The discrepancy is the more striking when dissection showed that the former contained in the crop the best part of a Spotted Dove (*Zenaida maculata* Vieill.) and the latter only the remains of a small bird.

304. Falco fusco-cærulescens Vieill. Orange-chested Hobby.

Iris brown. Eyelids, nostrils, and gape pale greenishyellow. Beak bluish-grey, shading into black at tip. Feet bright yellow; claws black.

This Patagonian Hobby (which I formerly alluded to as Hypotriorchis femoralis Temm. in 'The Ibis' for 1879, p. 412) is an extremely rare visitor to our district. The only records are three :--A male shot on 23 August, 1875, a female on 28 June, 1880, and another female collected by Miss Runnacles on 27 June, 1909. My own two specimens were shot in the Yngleses head-station woods. It will be noticed that the dates correspond to the winter-season.

305. Tinnunculus cinnamomimus Sw. Cinnamon Kestrel.

Since I last wrote of this species in 1879 (under the name of *T. sparverius* Linn.) it would seem to have become scarcer. My diary actually only mentions three occurrences (the earliest being on 5 March and the latest 11 September). which—even allowing for my frequent absences in the winter-time—is but a poor record. Claude Grant expressly

states that very few were seen by him; though, as he actually noticed three or four in the winter of 1909, he had not much reason to complain. For a wild Patagonian bird, one of those which came under my observation somewhat startled me by its calm contemplation, as I rode past, from the roof of an unoccupied house quite in the centre of the neighbouring town of Ajó. As a rule, I have found it always very wary and shy.

306. Elanus leucurus Vieill. White-tailed Kite.

The White-tailed Kite is exceedingly rare in our district, Claude Grant only obtained two specimens during his two visits to the Yngleses. The following are my sole experiences :---

| 3 May, 1875. | One seen. Yngleses head-station |
|-----------------|------------------------------------|
| | woods. |
| 30 Aug., 1875. | Pair. In rincónes. |
| 31 Aug., 1875. | One. Passed over Yngleses garden. |
| 3 Sept., 1875. | One. As above—probably the same. |
| 30 June, 1886. | One shot. Yngleses head-station |
| | woods. |
| Summer, 1898–9. | Twice seen, as above. |
| August 1899. | One frequenting head-station woods |
| | and searing poultry-yard. |

Since the last entry I have no further record to date.

Mr. Hudson draws attention to the fact that this Kite " in its actions strikingly resembles a fishing gull, frequently remaining poised in the air with body motionless and wings rapidly vibrating for fully half a minute at a stretch, after which it flies on or dashes down upon its prey." I was deceived myself in this way on our first time of meeting (and subsequently mentally recorded the species as the "Gulllike Hawk"). The individual in question 1 took to be, at a distance, an immature *Larus maculipennis*, and 1 was much exercised why it should occasionally poise and hover over the wood, until the mystery was explained when there was a sudden (but unsuccessful) stoop downwards, doubtless at a nesting Spotted Dove in one of the trees.

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A young male in my collection (obtained by Claude Grant) has the following notes on the label :---" Iris clear hazel-brown. Bill black. Cere, gape, orbits greenish yellow. Legs and toes lemon-colour. Claws black."

307. Rostrhamus sociabilis Vieill. Sociable Marsh-Hawk. Adult. Iris ruby-colour. Gape and bare parts round eye bright orange-red. Beak and claws jet-black. Legs and feet bright orange-red.

Young. As above, except gape and bare parts yellow. Legs and feet orange.

Since I described the habits of this handsome and interesting species in 1879, my diary furnishes me with but little further information. It is fairly regular in its migration, arriving in this district about the middle of September and leaving midway in March, though I have known it to be abundant at the end of August and to disappear at the end of February, in spite of overflowing swamps. Whence it proceeds and where it goes-particularly during such an epoch as that of our four years' drought-I do not know; but in such floods as that of 1899-90, and the still greater one of 1913-15, the numbers all over the country (during the usual season) were extraordinary. Not only were they in evidence in their favourite swamps and all over the inundated country-side, but flying over the Yngleses head-station and woods (one individual actually working through the dark recesses of the latter like an Owl), and occasionally even alighting on a Eucalyptus or Tala tree (again a most unusual procedure). As the shallows dried up, and the waters withdrew into their normal swamps, it was wonderful to see the accumulation of water-snail shells (Amnullaria canaliculata Lamarck), the sole food of this Hawk, at the foot of each and every isolated Durasnillo or elump of the same trees, or posts of a fence passing through or near a swamp. "Bucketsful" would be the only adequate description. One such heap at the base of a post numbered over 1500, and all the posts on the line of fence, for a considerable distance, had an approximate quantity !

I believe there was a nesting-colony in the centre of a deep swamp near the Yngleses head-station in 1913, and I have had occasional odd clutches of eggs brought to me at intervals during the past years; but, frankly speaking, the situations affected for breeding-purposes are not easy of access or to my liking. The rushes are too dense for canoe-work, and to negotiate them on horse-back calls for youth, recklessness, and a horse equally powerful and steady. So I content myself with saying "I have been there," and a reference to one such colony as described in my former paper (Ibis, 1879, p. 414).

The usual clutch of three eggs (previously described) average 42×35 mm.

309. Milvago chimango Vieill. Chimango Carrion-Hawk.

Iris very dark brown. Beak light brown. Bare parts pale white. Legs and feet light grey. Claws brown, also the beak.

To my former notes on the Chimango, Mr. Hudson has added such a detailed and interesting account of the species and its habits that any further remarks on my part can only be of an incidental nature, and only refer to its nesting characteristics.

In passing, I would corroborate my original statement as to the large numbers which roost at nights in the swamps during the winter-time.

Referring again to my previous observations on its nesting-sites—when I insisted on its local preference for the centre of a large or deep swamp versus trees or grasscoverts,—I now furnish the following modified rectifications. From 1873 to 1892 I had continued to take nests solely in the first-named situations. Then, in the last-named year, I found three separate nests on the ground—" merely a hollow amongst grass, roughly lined with a little wool,"—the last as late as 24 December. There was no recurrence of the experience until 3 December, 1898 (one similar nest). The following year (1899), on 5 November, I came across no fewer than six scattered nests in the rincónes, amongst the esparto-" all built of esparto, deeply cup-shaped, but slight : lined with some wool. Three of these had newly-hatched young." The three preceding instances constitute my personal knowledge of the Chimango as a ground-nester. As a tree-builder I have absolutely no record until 1913, when an extract from my diary (under date 1 October) states "a pair observed building a nest at Cumming's puesto (sub-station) at the very top of a Wattle-tree, about twenty feet from the ground, and where they had much difficulty in conveying the long slender sticks on account of the windy day. First instance of tree-nesting which has come under my observation in forty years." Again, on 30 October, 1915, "a pair building in Eucalyptus tree on the roadway and close to my house at Yngleses head-station. Am also informed of another nest in Tala wood not far off, where also a brood was brought off last year." All these three nests were built of sticks. It is true Claude Grant's collection of ten eggs (representing, say, four clutches) was taken from either tree- or ground-nests, but it is to be borne in mind that he struck the beginning of the big drought at Ajó, when all the swamps were dry.

If the abundance of the species is taken into consideration, and the number of natural and artificial woods (even the rincónes are dotted with Tala trees), whilst also the district is fully blessed with thistle-beds and grass-coverts, my contention I think is fully proved that the Chimango in our district is inherently addicted to the habit of sceking the swamps for shelter at night and the rearing of its young in the nesting-séason.

The eggs, previously described, average 43×34 mm.

310. Polyborus tharus Mol. Carancho Carrion-Hawk.

Since I wrote in 1879 respecting this bold marauder "Very common, and very destructive to lambs," circumstances have undoubtedly altered. The diminishing number I trace back in my diary to the year 1898, and I think it has not been confined to this locality alone. It is attributable doubtless to the increased persecution brought on by

the destructive and mischievous habits of the bird, in conflict with the enhanced value of sheep-stock. In the old days, the ordinary Merino * sheep was of small account (I once bought from a neighbour 400 at 15d. for consumption), and little attention was paid to the annual toll in newly-born lambs or the loss in sheep-skins destroyed before the shepherd discovered a dead animal. A shepherd's invariable reply, on being interrogated as to the deficit in his flock at the half-yearly counts, was "Lost a campo," i. e. either hidden in a thistle-bed or grass-covert until months had passed, or the skin ruined by Caranchos immediately after the sheep's death. And the explanation was tendered and accepted, without comment. Times have changed ; the improved sheep-breed stocks are too valuable to be dealt with in the former casual manner, and the shepherd is called upon to be "á campo" himself all day long, and not merely supervise the movements of the flock from the kitchen of his puesto and the look-out ladder reared against the gable of the roof; so that now the sheep-skins handed in must tally with the live-stock counted, or the Gentle Shepherd is treated most ungently, and has a short shrift. Hence, the general harrying of nests wherever they are found, the use of the shot-gun, and the wholesale employment of strych-The last-named is an efficient, but risky factor; nine. accordingly, we always keep the poison under lock and key, and it is only made use of-on scientific principles-by one of the members of the staff. For that purpose a newly-dead horse is chosen, or an inefficient mare is killed + (carrion of

* The Merino was a most timid animal, and would abandon her newly-born lamb on the slightest alarm; whereas the modern Lincoln or Cross-bred mother stands by her offspring, and defends it from all comers.

† In connection with the above, I would draw attention to the following non-ornithological but curious fact. When a Gaucho takes off the hide of an equine animal he never skins the head, which, with the ears attached, he invariably severs at the last vertebra and leaves apart. Not so with anything bovine; the whole of the head-skin (including the very lips) is removed intact with the hide, and the head is not detached from the carcase. It might be argued that the head-hide

this nature invariably attracts the Carancho and the Blackbacked Gull in preference to that of a cow or sheep); a score or two small gobbets of meat are detached, pierced, and some crystals of strychnine inserted, and these are scattered on or about the carcase-it being the case that the quarry will bolt these convenient morsels without suspicion, but is shy of any obvious poisoning of the main dish itself. Personally, I do not like the last-named method, as, in addition to a dozen Caranchos dead round such a "kill," I have seen quite a holocaust of Gulls (of various species), Chimangos, Bienteveos, etc., against which there was no grudge; and it was but too obvious their death had not been a peaceful one. However, to return to my opening statement : A gathering of half-a-dozen or upwards is no longer frequent in our district, and I would not think of going out on a moonlight night as of vore with chalked gunsights, to shoot them in the outlying woods of the headstation, where they formerly roosted in abundance.

I had thought to have exhausted all there was to be said about the species and its habits in my former paper, but Mr. Hudson has infinitely improved upon my notes with a fuller description and a wealth of details and anecdotes. To the latter I have but one or two to add, culled from my diary. On one occasion, I saw "a pair following an Ovenbird in the open, which was ultimately seized on the wing before it could gain the adjacent woods, and carried off." My experience regarding its raptorial habits is so dissimilar to that of Mr. Hudson that I was much impressed with the occurrence. Claude Grant also confirms my opinion— "never saw it take living prey." Another entry, referring to "no less than sixteen Caranchos trying to make a square meal off one Waterhen," is indicative of short commons.

of the former is of less commercial value than the latter, which may be admitted; on the other hand, the horns of the cow cause an extra trouble in skinning, which does not arise in the case of the horse. But why always subsequently separate the head of the nobler animal, and leave that of the other *in situ*? The Gauchos themselves, on being interrogated, have no other reply than that of "We have always been accustomed to do so."

Finally, the late flood-years, 1913-15, are characterised by "a marked scarcity in the species, in spite of so many dead sheep lying about."

Hudson describes how they " will follow a sportsman to pick up the wounded birds, keeping at a safe distance themselves." He is quite right in regard to their caution, so long as the sportsman remains erect, gun in hand. But I have invariably found that on bending or kneeling over my game, with the gun laid on the ground or concealed by my person, the otherwise wary Carancho will approach flying curiously up from behind, when a quick rise to my feet and a snap-shot overhead would bring it down to the accompaniment of a screech of surprise and dismay (when a Carancho is in trouble he lets the world know it !).

Confirming former breeding-notes, I have found it beginning to build or repair an old nest actually on the 1st of May (beginning of winter), in the middle of that month, early in June, and not unusually in July.

The handsome clutch of three eggs has been fully described. They vary greatly in appearance and size. My last general average gives the measurements as 62×48 mm.

314. Phalacrocorax brasilianus Gm. Brazilian Cormorant.

In 1896, the late Dr. P. L. Sclater wrote me that he was sure of the existence of a second Cormorant in the Bay (i.e. the estuary of the River Plate), and requesting me to try to obtain specimens. His supposition was based-according to a previous communication made with the same object to Mr. John J. Dalgleish in 1894-as follows :-- "You will see that Aplin observed two Cormorants in the River Plate, the smaller of which he calls P. penicillatus (p. 152). This is not correct, and I do not know what the species is. Could you persuade Mr. Gibson (whom I had the pleasure of meeting at the B.U.U.) to get us some specimens? He is nearby, I believe." From my own knowledge in the Ajó district (inland, estuary, and seaboard), I am only aware of the existence of P. brasilianus, of which fact I think I was ultimately able to convince Dr. Sclater.

Hudson gives the range of P. brasilianus to as far south as the Patagonian rivers. But though he entertains the possibility of two other species which belong to southern Chili and Patagonia (P. imperialis King and P. albiventris Lesson) as occurring in the southern provinces of the Argentine Republic (and therefore embracing that of Buenos Ayres), there seems to be no absolute warranty for the suggestion.

Of the local abundance of the species here there can be no doubt-wherever there is water, fresh or salt. Perhaps, when I referred to the Atlantic seaboard, I should actually have drawn the line at Cape San Antonio itself, for I have no record or recollection of its occurrence on the sandy seashore. Inside the Cape it is numerous on the coastal banks and mud-flats; and on all the Cangrejales with their tidal lagunas. Amongst the swamps one finds it abundantly, singly or in small groups, perched on a down-bent durasnillo over the surface of the water, or more securely established on the post of a wire-fence. During the spring and early summer of two flood-seasons (1899-1900 and 1913-15) large flocks were in the habit of passing the Yngleses head-station, travelling approximately from south-west to north-east and returning at sundown. These may have had some roostingsite, or possibly a nesting-colony. It was on one of these occasions, in the early morning, that one or two of the birds produced the sound alluded to by Hudson, and which resembled a pig grunting excitedly. To me the experience was unique, as it was to the native boys accompanying me, who had never heard it before.

Regarding its breeding-habits I am in complete ignorance. In referring above to a possible nesting-colony, I have in my mind's eye the broad and deep cañadon of the Real Viejo, where it makes a bight in the woods of that name—a situation formidable to a horseman in normal seasons, but quite impossible in flooded years, and when, more by token, peones and shepherds are too fully occupied otherwise than to attempt adventurous expeditions into such a fastness in search of bird-colonies.

315. Ardea cocoi Linn. Cocoi Heron.

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In 'Argentine Ornithology' Mr. Hudson's long article is less an account of this individual species than an interesting dissertation or '' causerie'' on Herons and other birds in general.

My own previous notes of a dozen lines (Ibis, 1880, p. 158) would seem to embody all I had to state about the Cocoi Heron. My diary since that year is only a long record of birds observed, singly or in pairs, and at all seasons of the year. It has neither increased nor diminished in numbers, but in the spring of 1913, from September to the end of December (when the flood was at its greatest), I saw only four between Buenos Ayres and Ajó on as many journeys, and none at all on the Yngleses. There was apparently too much water—with consequent dispersal of fish-fry—for even a Heron.

I must qualify my former statement to the effect that the Cocoi Heron "nests singly, not in colonies." For, though the first part is correct as a general rule, yet I have since found five pairs or upwards associated with a colony of the White Egret (*Ardea egretta* Gm.). In this latter case the nests resembled those of the Egret, being built solely of junco and slight in make; whereas solitary nests are more solid, with a basis of durasnillo.

The eggs have been already described. None of my later clutches exceeded three in number. The average measurement of the eggs is 65×47 mm.

316. Ardea egretta Gm. White Egret.

Iris light yellow. Eyelids and bare parts round eyes greenish-yellow. Bill yellow. Legs, feet, and claws black.

Hudson has incorporated my former notes in his brief allusion to the common and widely-distributed White Egret in 'Argentine Ornithology.' Accordingly, there only remains for me to bring my account of 1879 up to the present date.

Had my esteemed friend-the writer referred to-foreseen

the cruel and pitiless persecution this most lovely and harmless bird was to undergo from the votaries of fashion, he would have used his able pen and caustic wit to some extent, if, as it may be anticipated, to no effect. To the hunting of the Nutria (Myoptomus coupu) has succeeded the pursuit of the "Pajaro blanco" or White Bird ; and the war of extermination has raged for over two decades. To show the lengths it was carried :- In 1897 two hunters made a raid on a nesting-colony of the Yngleses ; the uninvited visitors were strangers to the district and had ridden all the way from Mar del Plata (the well-known fashionable watering-place thirty leagues to the south), having heard that such a colony existed under my protection. As events turned out, the protection proved effective; for the poachers were surprised early on the first morning of their would-be exploits, and before they had killed more than a half-score birds.

Needless to say, none of my own people are allowed to indulge in the bird-plume trade. But it is a curious irony that colonies of this nature sometimes ignore or are ungrateful for the sanctuary afforded them. The settlement alluded to consisted of this Egret (A. egretta), the Dark Night-Heron (Nycticorax obscurus Bp., Roseate Spoonbill (Ajaja rosea Reich.), and White-faced Ibis (Plegadis guarauna Linn.). Situated in a very deep swamp and totally isolated from all traffic, the colony was only disturbed on the occasions when my town-visitors desired to inspect it. If these happened to include ladies I had a boat provided. which was drawn by a horseman or by a harnessed horse driven from the bows of the craft. As the thousands of birds left their nests and hovered overhead in the brilliant sunshine the scene was of extraordinary beauty-the snowywhite Egrets, rose-pink and vermilion Spoonbills, iridescent Glossy Ibises, and grev-blue Herons, all in kaleidoscopic movement-with the blue sky above and blue water and dark green rushes below (" Move the boat a few yards, Pedro," sotto voce, as an egg explodes in a near nest and a whiff of sulphuretted hydrogen grows and spreads !). The

duration of this settlement extended over several years, but it has been totally descried since 1898.

As I formerly recorded, the White Egret is irregular in its appearance. The fact is emphasized by my notes taken during the late memorable flood. From 16 September, 1913, to 19 March, 1914 (spring and summer), whilst I was in residence, I only saw a total of four individuals on the Yngleses : notwithstanding which, I was told on good authority of a nesting-colony on the neighbouring Tuyu estancia, not half-a-league from our boundary-line. "Gross ingratitude for my former protection and care" is the remark appended to the entry in my diary. Again, on a brief visit lasting from 1 September to 4 November, 1915, under the same flood-conditions, none at all were seen.

The nesting-habits have been fully described by myself. Subsequent observations state that five and four eggs are common clutches. Also, that the sitting birds are not shy; and are silent except when two neighbours disagree, "when they draw themselves up to their full height, erecting the head and neck plumage, and clatter their mandibles at each other, looking unutterable things the while."

Average measurement of eggs 55×39 mm.

317. Ardea candidissima Gm. Snowy Egret.

My former notes and those of Hudson embody possibly most of what is to be said about the Snowy Egret.

Much of what I have just written about the preceding species (A. egretta) is applicable to A. candidissima. From 1886 to 1898 there is an absolute blank in my diary, whatever may have been the cause of same. At any rate, the succeeding years are emphatic in their uniformly negative sense :—" None seen about the Yngleses," " None observed on journey to Dolores or Buenos Ayres," etc. In the recent flood-years I record its total absence in equally clear terms.

It may be that the above phenomenon is of a passing or casual nature. The graver alternative is the gradual extermination of both species in the Argentine Republic and Paraguay. I am aware that in the latter country the very Indians themselves have been enlisted in the nefarious plume-traffic, and that winter visitors and tourists to the capital (Asuncion) are keen competitors with the local traders.

I have nothing to add to my former notes on the nestinghabits of the Snowy Egret. My egg-book gives the last record in 1886, when it was nesting in community with the Roseate Spoonbill in a colony situated in the Cisñeros cañadon.

The average measurement of the eggs is 54×40 mm.

320. Butorides cyanurus Vieill. Little Blue Heron.

Adult male. Iris yellow. Bare parts round the eyes and base of bill bright greenish-yellow. Bill dark brown, shading into black at tip. Legs and feet olive-green. This bird has a curious sulphur-coloured tuft of down on the breast and thighs.

Female as above, except that the bill is black instead of dark brown, with the under edge of lower mandible pale vellow.

That I should have overlooked the occurrence of this little Heron from 1872 to 1899 is possible, but hardly seems credible. Yet, when my local observer. Francesco Roldan, brought me one of a pair in March of the last-named year, the species was a complete novelty to us both. Roldan informed me it was one of a pair, and looked very small as it sat huddled up on a rush beside clear water, in a deep cañada. On taking to flight, it uttered a harsh powerful note. What happened to Roldan was, that after placing the dead bird in the bows of the boat, he was hurriedly changing his position for a shot at its mate, when he slipped and fell, with the result that the gun was discharged, singeing the present specimen and blowing a considerable hole in the side of the boat.

Perhaps three or four were observed in the course of the next four years. In 1904 I secured one of a pair : "Female. Notes on iris, bill, and feet similar to above. Soles of feet bright saffron. Claws dark brown." The two following

years only make mention of one bird seen. Claude Grant did not obtain the species himself at Ajó in 1909, but quotes Miss Runnacles as having observed "quite a number," in spite of the drought, during the summer of that year, of which three specimens were obtained, as also the eggs for the first time. In the summer of 1913-14, during great flood, I noted half-a-dozen, in pairs or singly, and took two nests.

It would seem to be a summer visitor in our district; rare, and irregular in its appearance, even in seasons of flood. It is not at all shy; witness the following: "Shortly before sundown one passed through a glade in the garden at Yngleses head-station; coming out of the woods and flying over the players on the tennis-court, at a height of perhaps twenty feet; and so out across the estancia patio towards the open country." When disturbed, it rises with the neck curiously elongated, but almost immediately draws it in, then at first "wafts" slowly along till the rushes force it to rise, when the speed becomes greatly accelerated. From its rarity, and peculiarities of flight, one is generally too startled at first to readily recognize what family the bird belongs to. The harsh "churr"-ing cry is not general, even on these occasions.

Small fish or fry constitute its food, and one which I skinned was singularly fat—an unusual trait in a Heron.

Of two nests which I took on the 20th and 21st of November, 1913, one contained three eggs and the other only one. They were situated about a hundred yards apart, amongst the junco in a very deep part of the swamp, and absolutely identical in form and materials. Each consisted of a small platform of dry junco stems suspended some twenty inches above the surface of the water, in such a fashion that one could see all below it. They were very slight, and comparatively shallow—perhaps fourteen inches across, outside; and six inches across the hollow for the eggs. The birds rose short and silently on both occasions.

Eggs pale blue in colour, with an average measurement of 39×29 mm.

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321. Ardetta involucris Vieill. Variegated Heron.

To my previous notes on this species (Ibis, 1880, p. 159) Hudson has added such an admirable account in 'Argentine Ornithology' that there is little left for me to supplement. Of the extraordinary gift it displays in protective self-effacement, I have not been an actual witness. But Mr. Hudson's accuracy of observation is only equalled by his descriptive powers—to both of which I bear witness.

My diary presents no novelty between 1879 and 1913. The species was regularly observed ; but never to such an extent as to call it common or even abundant; and in the winter-time it seemed even less so. In the spring and early summer of 1913 (when the country was so inundated) I made various journeys to Buenos Ayres and was also much about on the Yngleses, without seeing a single bird from the middle of September till the end of January : though it must be admitted that no fewer than three clutches of eggs were brought to me in that interval. On the 29th of January, however, riding (and nearly swimming at times, "bola á pie" as it is called when the water is over the withers, because the horse's feet appear to be rolling on bowls) between the Palenque district and the head-station I put up no fewer than nine individuals, " the first three rising close together from amidst the water-weeds in shoal water at edge of big cañadon ; the other six from deep junco-beds." From that date to the end of March it was undoubtedly very abundant, and observed every day when I had occasion to be out and cross the larger swamps. During my brief visit to the Yngleses of September-October 1915, under similar flood-circumstances, I only saw two or three individuals.

I have known it to rise so close to a horse as to be knocked down by the rider's "rebenque" or short whip. One such bird was brought to me, but only lived for a day. When irritated, it uttered a feeble strident note—the sole occasion of its kind, for otherwise it is always mute.

I have never had the good fortune to discover a nest myself, and of the dozen clutches which have been brought to me, the account varies considerably. The consensus would

seem to be that it is always situated in a junco-bed in a very deep swamp; that it is invariably and entirely built of the junco-stems, generally dry, but on one occasion of the green flowering extremities; that it is not built up from the surface of the water (as I had previously stated), but suspended above it at a height of a few to twenty inches ; it is very small, as Hudson mentions, and generally a slight. shallow, platform-structure. But amongst the above, three of a very distinct design were described to me, taken by different collectors (two of whom were quite trustworthy) and at intervals of many years-1873, 1892, and 1913. These, though small, were of a cup-shaped formation, and rather neat. It had occurred to me that the weight of the full clutch of five eggs, after a period of incubation, might have caused the interwoven platform, of small pliable stems, to bulge downward : but on reference to the three instances quoted, only one (consisting of four much-incubated eggs) afforded the possibility; the others were of one and two eggs respectively and quite fresh. So the divergency remains a problem for the present.

The date varies from 1 October to 8 February, no fewer than three occurring in January. Of the dozen clutches there are four of five eggs each and three of four (muchincubated). As has been said, they are of a very beautiful rich green colouring, particularly when fresh.

Average measurement of eggs 32×26 mm.

323. Nycticorax obscurus Bp. Dark Night-Heron.

Male. 11 September. Iris orange. Legs dark blue.

Male. 11 February. Iris orange-red. Bare parts round eyes, gape, and under mandible green. Upper mandible black. Feet green, claws brown.

The Night-Heron has held its own in our district ever since I knew it first in 1872, and I confess to the pleasure its presence always affords me as I ride through the swamps. So long as any water is to be found at all in a dry season, one or two may be met with at the deeper ponds (it seems to be entirely a freshwater bird, especially as the cangrejales do not afford it the requisite rush-coverts). I judge it to be partly migratory, as it is scarcer in the winter-time.

In my round journey between Buenos Ayres and Ajó, 15-25 September of 1913, at the height of the inundation. I did not observe a single individual, nor on the Yngleses in the interval. The first was noted there on 10 October, after which it continued to be observed-sparsely-until the end of December. In January 1914 there were more individuals and some small flocks which, by the 30th of that month, had so increased that I wrote: "In great numbers, amounting to considerable flocks in some cases. I have certainly never seen so many in one day." February was similarly prolific : but, as I remarked, "The summer heats have produced such dense surface-growth of duck-weed, that this and other similar species are forced to congregate at the so-called passes, where traffic has left some open water." The following year (1915), during the months of September and October, I found it generally distributed, though not so abundant as in the previous season.

Hudson has mentioned its habit of constructing false nests or platforms to perch upon, formed by breaking down the rushes across each other. These, in my early days, were a source of mystery to me, as I looked upon them as embryo nests for breeding-purposes. The perch selected for a fishingstation is generally a stout durasnillo beside clear water, the bird's weight being sufficient to bend down the sapling to the desired height.

To quote from Hudson, "On being disturbed by day it rises heavily flapping with a loud qua-qua cry." At nighttime, the note produced is a strong fox-like bark (very eerie as the horseman struggles through the deep and apparently endless swamps), and I have heard them repeating the same note as they circled restlessly round the head-station buildings at night after a heavy rain.

In 'The Ibis' for 1880, p. 156, I described a nesting-colony of the year 1873, where it was in community with both Egrets (*A. egretta* and *A. candidissima*). One such other I discovered in 1884. This time, alas, its only confrère

was the larger Egret (A. egretta). The situation selected was again the heart of a large and deep cañadon. The Night-Heron was in a minority; of its nests, some were distributed amongst those of the Egret, but the greater part were retired to one side of the colony, in a thick bed of junco, and placed some distance apart from each other. They were smaller than those of the Egret, almost invariably built up from the surface of the water (whereas the Egrets' are of the platform nature), and rather more strongly constructed, the material being the smaller dry junco-stems. The majority of the clutches were much incubated (2 November) and a few nests containing young—one with no fewer than four. The full clutch, however, seemed to be three.

Average measurement of eggs 50×37 mm.

325. Euxenuira maguari Gm. Maguari Stork.

The "Cigueña" or Maguari Stork is always a striking feature in the Pampean landscape, either stalking meditatively over the plains or soaring skywards. Large in size, with bold black and white plumage, and scarlet lores and legs, it is a most handsome and familiar bird. Harmless, and a great scourge to all vermin and snakes, it is rarely molested, and it is often found close to the estancia buildings (particularly at the "kill") and sub-stations, or even in the vicinity of small towns.

I said my say about the species in my former paper, and my diary since then contains little in the way of novelties. Though common in our district, I have never seen congregations of hundreds, such as Hudson alludes to; groups varying from half a dozen to thirty have been the largest number. These naturally are drawn together by the casual attraction of locusts, fish-fry, or tadpoles, or, it is to be feared, an abnormal number of grass-nesting ducks, when the eggs and ducklings pay heavy toll. Occasionally it is to be seen fraternising with, or in company with, the Wood-Ibis (*Tantalus loculator Linn.*) when that irregular summervisitor comes to us. Undoubtedly the Maguari Stork is somewhat of an egg-robber, and I have witnessed it harry **a** Lapwing's nest in spite of the owners' strenuous defence.

The nesting-habits have been fully described formerly. Of nearly a score nests subsequently examined, the full clutch has never exceeded four eggs and as often consists of three. The average measurement of these is 74×52 mm.

326. Tantalus loculator Linn. The Wood-Ibis.

Adult male. Iris dark blue. Head and upper half of neck bare, of a dusky black colour with a shade of purple in it and covered with whitish scales. A horny plate on the vertex of the head of a light brown colour. Base of bill black verging into dark brown. Legs bluish; feet flesh or pale salmon colour; claws black. Under surface of wings tinged with pale pinky-vellow.

Female similar.

Young. Iris dark blue; head black, upper half of neck dusky; bill yellowish or bone-colour; legs and feet dark grey, almost black, at feet-joint pink mottled with black.

The Wood-Ibis is entirely a summer visitor, though not necessarily an invariable one, some years passing without its putting in an appearance at all in our district. On the whole, since 1875, I have observed it with considerable regularity-alone, in pairs, small flocks, or even gatherings of as many as one to two hundred. The first arrivals have been as early as 12 November, the latest departures 22 April, the two extremes consisting of stragglers. Years of drought are the most favoured ; in the first summer of the great flood only four were seen, and these at the curiously late date of 27 March. Some of the arrivals would seem to consist of immature birds only, others of adults, or again of both. Occasionally they are to be found on the open plains, but as a rule they gather to the shrunken lagunas and mud-holes, and one wonders how they eke out a livelihood in these situations. Easily approached on horseback, they are shy of the gunner on foot. As late as January of 1917 I surprised a flock of approximately two hundred at a small laguna (all that was left of

a great cañadon), and as I rode round the covering belt or thicket of durasnillos they rose in grand and wild confusion, the bulk of them to settle down again; whilst others, in pairs or small flocks, made off to the neighbouring Real Viejo swamp. Seen soaring, or flying at a height, the Wood-Ibis bears a considerable resemblance to the Maguari Stork in size, majestic flight, and plumage, whilst the naked head and different colouring of the feet are not readily distinguished. In these cases I have found the curved bill of the former, outlined against the sky, the readiest clue to identification. So far as my experience goes the Wood-Ibis is mute.

327. Plegadis guarauna Linn. White-faced Ibis.

Confirming what I wrote formerly on this Ibis—the "Cuervo" or Crow, as the misapplied Hispano-American rendering designates it,—Hudson furnishes further information. Which, again, I would wish to supplement from my later notes.

That it is a migrant is undoubted; but, so far as this locality is concerned, the inrush may take place as easily in the autumn as the spring, given the favourable conditions of heavy rains. As a rule, it is scarcer in the winter months, though always resident; but even then, in certain years, I have known it to be about in large flocks at the end of June and onwards. Altogether my diary affords much general data, in which would-be deductions are constantly subverted by distracting variations.

It is in the early spring, however, that one looks for the great migration proceeding from the south. The arrivals are coincident with the spring rains, and if the former are unusually numerous a wet or flood-season may be anticipated. I have frequently heard the remark from old Gauchos on these occasions: "There are many flocks of Cuervos coming in, Patrón; look to yourself, for a flood comes also." And the prognostication was always correct, as I know from grim experience. How often have I lingered at the "Fenometer" or swamp gauge-post, after noting that it marked another

inch above normal, and watched the incoming flocks, divided between the ornithologist's interest and the landowner's anxiety. Arrow-shaped, javelin-formation; small bands, huge flocks-now high up in the sky, anon skimming unexpectedly over the rush-beds; silent, inexorable, innumerable. And with a sigh, I have gone back and said to my staff: "The weather is clear and the barometer favourable, but the water has risen further, and the Cuervos continue to come in like an Egyptian plague ; to-morrow we move out such-and-such threatened flocks of sheep on to the higher land." For with fifty to sixty flocks, summing perhaps a hundred thousand sheep, and a country-side resembling the old Lincoln or Cambridgeshire fen-districts, the problem and its solution were of a difficult nature, in spite of the legend that "the Gibsons had evolved a webfooted breed of sheep at the Yngleses"!

The Cuervo is a very tame bird, and pays no attention to the passing horseman or even the approximation of a human being on foot. To the ordinary gunner it presents no interest, either for the pot or, happily so far, on account of its iridescent plumage (I speak to its immunity in our own locality; from somewhere must come the many wings and tails one sees on ladies' hats in the civilised or fashionable world). Nevertheless, I was rather taken aback by two curious instances of domesticity in a bird of this family. One hot forenoon in February an individual walked into the patio and moved about completely regardless of those people present; it pecked at the dry turf in a mechanical and perfunctory manner, and finally flew away. Fifteen years later, also in the summer-time, another bird apparently found some suitable food on the garden-path a few yards in front of the dwelling-house, and made itself at home for quite an appreciable interval.

Both Hudson and myself have mentioned how it is not confined to the marshes, but feeds on the plains in the summer when grasshoppers and small locusts are abundant. It is also a feeder in the vicinity of carrion or offal-Hudson says on the larvæ of the flesh-fly-but I opine that

when the kill is fresh, small particles of animal matter do not come amiss.

At one time I used to see it in conjunction with the Little or Snowy Egret (*Ardea candidissima*) when that species was still common with us. And it is often associated with the two Gulls (*Larus cirrhocephalus* and *L. maculipennis*), as witnesseth the following entry: "In extraordinary numbers—packed like sardines—whilst feeding on fish-fry in shoal water in company with Gulls. I put up one such flock which absolutely filled the sky with black wings."

It is only on taking to flight that the loud laughter-like "ha-ha-ha" is uttered. The flocks on wing are mute. A wounded bird when handled gives vent to a feeble squawk.

Hudson is silent as to its breeding-habits, and I myself was ignorant of these at the time I formerly wrote in 1880. On 30 November of 1885, however, it was my good fortune to find a large colony nesting in community with even a greater number of the Roseate Spoonbill (Ajaja rosea) in the heart of the immense Cisheros cañadon, which lies between the Tuyu and Yngleses estancias. The bottom of the swamp being fairly firm and even, and my horse proving too nervous for the task of facing the movement and noise of the birds, I withdrew to terra firma, staked out the steed, stripped to my shirt, and returned to the scene. With the water beyond my waist in most places, it was not altogether easy to pencil notes and bestow eggs in the fishing-creel slung round my neck ; but otherwise I had full freedom of action, and the day was fine, the water warm (and free from leeches), and there were no stinging flies or mosquitoes about. Under these circumstances, the interest of the subject was enhanced by the beauty of the birds-the rose-pink and intensecarmined Spoonbills and the metallicly-iridescent Ibises. I enjoyed myself immensely.

The nests of the Ibis were small light platforms constructed of dry junco, sometimes built up from the surface of the water, in other cases suspended a foot and a half or two feet from the surface. There were already some young on this occasion, and a fortnight later, on a subsequent visit, most of the nests had hatched out. Though the full clutch of eggs is three, I never saw more than one or two young in a nest. These, on being approached, abandoned the nest and scrambled away amongst the reeds.

The eggs are of a blunt-oval form, the shell without gloss. In colour, a uniform light blue. Measurements vary from 50×35 to 53×39 mm.

In connection with some of the foregoing species-all wateriowl typical of our great marsh system and birds after my own heart-I would like to mention the free-air collection I formed at the Yngleses head-station in 1885. They were all brought in as nestlings and fed by the peones' cook in the open patio, nor were they allowed to be molested by men, dogs, or cats. The feathered assortment consisted of the Roseate Spoonbill (Ajaja rosea Reichenb.), White Egret (Ardea egretta (in.), and White-faced Ibis (Plegadis guarauna Linn.)-perhaps half a score of each. There were also one or two Cocoi Herons (Ardea cocoi Linn.), and as many Dark Night-Herons (Nycticorax obscurus Bp.). Three "Chajas" or Crested Screamers (Chauna chavaria Linn.) lent weight and dignity to the assembly, and the dominant position once held by a former Maguari Stork, known to fame as "Byles the Lawyer," was promptly assumed by a Dominican Gull (Larus dominicanus Licht.), which neither feared man nor respected any other living being. With the exception of the last-named (a pinioned bird), all these flew about the patio at their own sweet will as they attained maturity, perched on the garden-railings after they had been fed, and roosted at night in the adjacent Paradise trees. Later on they began to make excursions to the neighbouring cañadas, returning at nightfall; in course of the ensuing winter they commenced to take "nights out," and when spring came they went away for good. To visitors, the feature of the exhibition was less the number and variety of all these beautiful birds than their extraordinary tameness

and the state of freedom they enjoyed. Locally my birdproclivities had long been known; but even my neighbours were startled to find Ibises where they would have looked for poultry, and to see Spoonbills, Herons, and Egrets winging their way from the swamps into the patio as the bell rang at sundown for supper, and proceeded to take up their abode for the night.

328. Theristicus caudatus Bodd. Black-faced Ibis.

The Black-faced Ibis or "Banduria de las Sierras," as it is denominated here, is a winter visitor to our locality, my earliest date being 28 April and the latest appearance 28 July. or three brief months in all. Moreover, these appearances are rare and very irregular. In 1875 I saw a pair. In 1880 I noted two or three pairs, and two small flocks of seven or eight. In 1882 there were even more occurrences, including a flock of about thirty. A long blank ensues until 1902, when two small flocks were noted-one on the Yngleses, and another thirty miles away towards Dolores. Since then my diary is silent. Due to my not infrequent absences from the locality in the winter-time these records are necessarily partial, but I am led to the conclusion that either from climatic reasons or, what is more probable, the altered conditions of human occupation between the confines of Patagonia and this latitude in the Province of Buenos Ayres, there is a restriction in the number of the species-or at least in its tendency to a northern migration (it is an ominous circumstance that the late Dr. P. L. Sclater should have written me in 1900 asking for a specimen-skin of the Black-faced Ibis, "as none existed from Argentina in the British Museum").

It is a most noticeable bird—in size, coloration, and cry. I have always found it frequenting the open campo or plains, where it is very shy and difficult of approach, even on horseback. On taking to flight, or when alarmed. the note is short, metallic, and sonorous. The flight is low and heavy, but powerful.

329. Harpiprion cærulescens Vieill. Plumbeous Ibis.

Since I wrote of this "Banduria" as being not uncommon (Ibis, 1880, p. 159), it has gone far to falsify my statement, and its plight seems even worse than that of its congener, the preceding species (*Theristicus caudatus*). From the above-mentioned year (1880) to the present date my diary holds only one entry—an allusion to a pair shot on the Yngleses in the winter of 1894, by Mr. Frank J. Matthew.

Both these "Bandurias" are too wild and shy, I take it, to visit or frequent inhabited localities. Should anyone have an opportunity of examining the railway maps of the Argentine, he will be struck by the amazing network of iron roads which traverse more particularly the Pampean Zone of the Province of Buenos Avres down to the River Colorado. These, with the development of agriculture and the corresponding system of colonies, have in the last thirty years gradually established a barrier no longer to be franked by migrants of the nature of these two Ibises, so conspicuous in appearance, so wild by nature-most emphatically denizens of the utterly lonely wastes. It is therefore a matter of congratulation and gratitude that Mr. Hudson should have put on record his interesting account of their ways and habits whilst they were still with us.

My former allusion to the one nest of the Plumbeous Ibis must continue to be taken as it was written—a strong supposition without absolute verification. Nor can I now trace the fate of the three eggs therein referred to (probably destroyed for want of satisfactory identification). I am informed that no eggs of the species are to be found in the British Museum.

330. Phimosus infuscatus Licht. Whispering Ibis.

Of very irregular occurrence, the recorded appearances of the Whispering Ibis in our district are few and far between. In April of 1898 it was observed in flocks passing over the north side of the estancia, "generally a pair in line, followed by other pairs at short intervals, to the number of sometimes

a dozen or more." In October of the following year a large flock was seen in the Rincones. None were chronicled again until November of 1901, when one individual was noted near the head-station in company with Gulls, and another in the Palenque district feeding in a cangrejal and quite alone. Since that year it does not seem to have again come under my observation.

Claude Grant found it no nearer than Paraguay.

331. Ajaja rosea Reichenb. Roseate Spoonbill.

My former notes upon the Roscate Spoonbill were brief, and at that time (1880) I had not yet discovered a breedinghaunt of the species.

To the first part there is not much to add, though, owing to the striking beauty of the bird, its image occupies a large space in the observer's memory and his diary. It is a great frequenter of open lagunas (either fresh or salt water) and small pools or ponds on the plains, and, being a spring arrival, is naturally associated with the fine weather and vivid vegetation of that season. Unceasingly active whilst feeding, one's attention is caught and held by the bird's movements from the moment that the rosy colour is observed far off-whether it is a single bird, a pair, or a flock. Here we have none of the Heron or Egret's watchful immobility. "Cucharón" or Big Spoon is its local designation, and the spatula-like bill sweeps constantly from side to side as its owner advances, rapidly or leisurely, quartering systematically the pond or mud-hole. On the wing again-say, a V-shaped flock of perhaps fifty, with a background of blue sky and fleecy clouds: can one imagine a more beautiful arrangement of delicate colouring? On these occasions the roseate tint is generally most in evidence, but when the sun happens to catch the proper angle for the carmined wing- and tail-coverts the brilliant effect produced is unique.

The 6th of September is my earliest chronicled date of its appearance (with a flock of no fewer than thirty). By the end of March it has generally disappeared again, though a possible straggler may remain into the ensuing month.

By no means a wild bird, a horseman can approach or pass within a short distance, and even the human habitation is not shunned. On one occasion, at a small pond in the outskirts of the town of Ajó and not more than forty yards from a somewhat busy building, I noted as I rode past the following-one singularly beautiful adult Spoonbill, various Ibises, two species of Wild Duck, some Brazilian Stilts, and two Domestic Duck, all of which (with the exception of the Wild Duck) absolutely took no notice of me. On a hot summer's forenoon (of 1914) a single Spoonbill came over the Yngleses dwelling-house and, sweeping low down, passed over the patio and out by one of the side-entrances, an occurrence which I was led to annote as "decidedly incongruous." Both Hudson and myself have mentioned how it can be domesticated when voung. In former years I have occasionally seen it in company with Egrets, Brazilian Stilts, and Spur-winged Lapwings in the patios of "fondas" and private houses in the town of Dolores.

Fish-fry is the food I have found in the crop.

The note of the adults is a croak; that of the young a cheep.

It was not until the 30th of November, 1885, that I found the Spoonbill nesting in the heart of the great Cisñeros cañadon, in company with the White-faced Ibis (Plegadis quarauna Linn.). The colony was a large one, but working on foot, as described under the last-named species, and with my view circumscribed by the high rushes, it was not in my power to form an estimate of the actual number. The nests were built solely of dry junco, and consisted of a light shallow platform with a small hollow in the centre at an elevation of about eighteen inches from the surface of the water. Three and four were the general clutches of eggs ; but on revisiting the colony on the 15th of December, when all the nests were hatched out, I found the broods consisted generally of two, only occasionally three, young. The following year (1886), on the 30th of October, the colony was in situ again, but fortuitous circumstances prevented

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me from visiting the locality in subsequent years. After a long interval. on 26 November, 1895, I found such another breeding-haunt only little more than a mile from the Yngleses head-station, where the associates of the Spoonbill this time were the White Egret (*Ardea egretta* Gm.) and the Dark Night-Heron (*Nycticorax obscurus* Bp.)—see account under these species. The Spoonbills were in a majority and might be numbered at from five hundred to a thousand pairs. Their eggs were all fresh (or nearly so), whilst the other two species were hatched out. The Spoonbills' nests were very close together, sometimes hardly a yard apart; otherwise, similar in material and construction to those of the Cisñeros colony. After nesting the two following years, this colony passed out of existence.

I have taken one clutch of five eggs, but the usual number is three or four; these are of a very irregular shape, but generally elongated. The ground-colour is a dirty white, with rusty-red markings and (occasionally) some violaceous blotches. As a rule, these are evenly distributed all over the eggs, and only in some cases increase towards the larger end.

Whilst the average measurement is 65×43 mm., individual specimens may vary from 70 to 61 mm. on the long axis and 46 to 41 mm. in diameter.

[To be continued.]

XXVI.—Obituary.

JOHN CHAMBERS MCLEAN.

WE learn with deep regret that Mr. J. C. McLean of Waiamu was accidentally drowned when crossing a river near his home in the Poverty Bay district of the Northern Island of New Zealand in December last. The river was in flood and he was washed off his horse by the strong current, and the mackintosh he was wearing catching in a snag under the water, he was unable to free himself though a very good swimmer.